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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/718,595	11/21/2000	Dan Kikinis	P1541D1	5336
33448	7590	09/03/2004	EXAMINER	
ROBERT J. DEPKE LEWIS T. STEADMAN HOLLAND & KNIGHT LLC 131 SOUTH DEARBORN 30TH FLOOR CHICAGO, IL 60603			PRIETO, BEATRIZ	
			ART UNIT	PAPER NUMBER
			2142	

DATE MAILED: 09/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/718,595

Applicant(s)

KIKINIS, DAN

Examiner

Prieto B

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 16-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This communication is in response to RCE/Amendment filed 07/12/04; claims 16-33 remain pending and are hereby set forth for examination. Claims 1-15 and 34-37, claims 16 and 25 were amended.

2. Regarding claim 16 and 25, the recitation: "the" or "said" "programming information" will refer to the "future programming information".

3. Claims 17-24 are objected to due to noted minor informality, specifically, these claims make reference to the set-top box of claim 16, which has been removed by the above-mentioned amendment. Correction is required

Claim Rejections - 35 USC § 103

4. Quotation of 35 U.S.C. §103(a) which forms the basis for all obviousness rejections set forth in this Office action may be found in previous office action.

5. Claims 16-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Broadwin, et. al. (Broadwin) U.S. Patent No. 5,929,850 in view of Eyer U.S. Patent No. 5,982,445 in further view of Williams, Jr. U.S. Patent No. 4,868,866 (Williams hereafter).

Regarding claim 16, Broadwin teaches a system for providing programming information, including a set top box, comprising;

a broadband receiver (140) to receive the displayable data stream (col 6/lines 50-60);

displayable indicia are pre-associated with commands (col 6/lines 18-23, 32-44) at a head end (100) (col 5/lines 21-36, selection options/thumbnails, col 9/lines 27-63, link data, col 6/lines 40-44) and provided as a part of the programming information in a displayable data stream (col 6/lines 18-23, 32-44);

circuitry to select the programming information, including the displayable indicia, and to cause it to be displayed (col 5/lines 64-col 6/lines 8);

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a memory (col 7/lines 13-34) for storing (col 2/lines 64-66) programming information including displayable indicia (col 6/lines 53-60) continuously received (col 9/lines 1-8, col 6/lines 28-31), wherein said memory is repeatedly updated by said programming information including displayable data stream (steps 446 and 448 of Fig. 8);

user-operable apparatus (152) to select the displayable indicia (col 7/lines 52-63, col 9/lines 15-26);

wherein, in response to selecting the displayable indicia, the command associated with the selected displayable indicia is executed (col 11/lines 6-26, col 7/lines 58-63, col 8/line 5-12, col 10/line 4-17, 58-63); however prior does not teach where the programming information is particularly future programming information;

Eyer teaches display data (displayable indicia) are pre-associated with commands at a service provider 100 (col 7/lines 59-col 8/line 19) and provided to head end (160) as a transport stream for distribution to the set top boxes (col 8/lines 20-38), display data is provided as a part of the program guide with program scheduling information (future programming information) in a displayable data stream, (col 4/lines 20-col 5/line 10);

a memory (col 8/lines 39-64 and col 9/lines 14-30) to store programming information (col 8/lines 39-64), wherein said memory is repeatedly updated by said displayable data stream (updated repeatedly see col 11/lines 1-12, or updated upon demand col 9/lines 5-13 col 10/lines 6-11, 21-26 or updated in real-time see col 10/lines 49-59); although the prior art teaches providing from a remote database receiving information from a plurality of sources, pages of data for a user; however it does not explicitly teach a remote database receiving information from a variety of sources, the database is periodically searched "scanned" for identified data.

Williams teaches a scanning periodically a database (col 8/lines 58-col 9/line 2, 32-41 and col 23/lines 67-col 24/line 40) for identified data (col 7/lines 50-65) for the user (col 11/lines 50-64).

It would have been obvious to one ordinary skilled in the art at the time the invention was made to utilize Eyer's teaching where displayable indicia are pre-associated with commands at a service provider system and provided as part of the future programming information in a displayable data stream to the set-top box, as taught by Eyer, motivation would include with the audiovisual content other audiovisual programming that is normally seen on television utilizing the commands associated with the audiovisual content to commands for controlling television and non-television appliance functions along with commands for purchasing over the Internet, as taught by Eyer. It further would have been obvious at the time the invention was made given the suggestions of Broadwin for providing periodically from a

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remote database information in the form of a page to the user, suggesting providing information news and stock related information, to utilize Williams teaching for providing a user periodically database information such as stock and news information, motivation would be to complement Broadwin system utilizing Williams suggestion of implementing his teachings for other type of information that can be formatted into a machine readable format compatible with whatever system design choice may be, including may be converted for broadcast in any readily format, and wherein user's receiving device may be a personal computer, readily implementable in Broadwin's system.

Regarding claim 17, wherein execution of the command comprises switching the display to a channel associated with the future programming (Eyer: switching channels, abstract, program guide schedule information col 4/lines 47-50, selection of particular programming service channel, col 4/lines 66-col 5/line 10).

Regarding claim 18, wherein a portion of the information received comprises WEB pages in a Markup Language (Eyer: abstract, col 5/lines 13-26).

Regarding claim 19, wherein the broadband receiver comprises a satellite data link adapted to download a satellite broadcasted data stream, and the information is received via the satellite data link (Eyer: Fig. 1, col 8/line 13-17, 30-32, 39-44).

Regarding claim 20, wherein a portion of the information received by satellite data link comprises Markup Language (110) (Eyer: Fig. 1, col 8/lines 39-52).

Regarding claim 21, wherein the future programming information is received along with television programming (Eyer: col 4/lines 20-col 5/line 10).

Regarding claim 22, a memory system (cache) wherein the future programming information including the command and displayable indicia associated with the command is stored (Broadwin: col 8/lines 53-56)

Regarding claim 23, wherein the broadband receiver (Eyer: col 5/lines 13-26) further comprises a satellite data link adapted to download a satellite broadcast data stream (Eyer: col 8/lines 20-38), and a land-based modem (324) (Broadwin: col 7/lines 64-col 8/line 3), and the future programming information is received

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by one or both of the satellite data link and the land based modem (Eyer: Fig. 1, col 8/lines 39-52, Eyer: col 4/lines 20-col 5/line 10).

Regarding claim 24, a user-operable WEB browser for browsing for Web-based information. (Eyer: col 9/lines 16-18).

Regarding claim 25, this claim comprises the method including features comprised in a set-top box discussed in claim 16, same rationale of rejection is applicable for the method claims.

Regarding claims 26-33 these claims are substantially the same as claims 17-24, respectively, same rationale of rejection is applicable.

6. Claims 16 and 25 are also be rejected under 35 U.S.C. 103(a) as being unpatentable over Harper et. al. (Harper) U.S. Patent No. 5,585,858 in view of Coleman et. al. (Coleman) U.S. Patent No. 5,844,620.

Regarding claim 16, Harper teaches a set-top box (600 of Fig. 3), (col 6/lines 40-41, col 3/lines 66-col 4/line 5), comprising;

receiver coupled to a broadband bandwidth channel for receiving digital/analog data, e.g. conventional television broadcast signals (i.e. a broadband receiver) (col 3/lines 44-col 4/line 5, col 6/lines 28-41);

receiving by said receiver displayable data stream (col 3/line 43-46, 52-65),

displayable data stream e.g. video and graphics signal from a head end, (col 6/lines 16-25, 31-35, col 9/lines 6-21) including command(s) associated with a displayable indicia (col 8/lines 19-26, col 7/lines 19-22, commands, col 19/lines 15-21, commands associated with displayable indicia, col 8/lines 1-14, 19-26, 34-42, col 9/lines 14-19);

circuitry (616 of Figs. 3 and 7, col 5/lines 6-11) for selecting in the displayable indicia stream (col 12/lines 17-34, displayable data stream col 5/lines 67-col 6/line 9) and to form displayable data stream (col 12/lines 17-34, col 18/lines 39-42), the display including the displayable indicia (col 17/lines 51-59);

user-operable apparatus (604 of Fig. 1, col 6/lines 41-42) to select the displayable indicia (col 6/lines 49-col 7/line 6);

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in response to selecting the displayable indicia, the command associated with the selected indicia is executed (col 18/line 59-col 19/line 6), in response to a selection of displayable indicia associated with a command is execution (col 7/line 65-col 8/lines 1-14); however Harper does not explicitly teach where displayable data stream including a displayable data stream which further includes future programming is received;

Coleman teaches receiving in real time video data including displayable data stream including future programming (video and graphic blended in received stream, col 2/line 45-55),

data stream including "demand data stream" further including future programming (i.e. schedule guide) is received, (col 4/lines 60-col 5/line 3), received (32), demultiplexed (34) and displayed (54) (col 13/lines 37-48, 62-col 14/line 4, 19-22, rendered i.e. cause it to be displayed, col 7/lines 2-14) program guide is acquired and displayed caused it to be displayed in real time, (col 6/lines 39-59 and col 7/lines 2-14 retrieved and displayed immediately);

displayable data stream information including displayable indicia associated with commands (col 3/lines 36-42, col 15/lines 32-42);

a memory to store said programming information, where said memory is repeatedly updated by said displayable data stream (storing e.g. in a RAM programming information repeatedly updated see col 1/lines 28-32, 56-col 2/line 11, repeatedly updated in real time col 4/lines 48-col 5/line 3); although the prior art teaches providing from a remote database receiving information from a plurality of sources, pages of data for a user; however it does not explicitly teach a remote database receiving information from a variety of sources, the database is periodically searched "scanned" for identified data.

Williams teaches a scanning periodically a database (col 8/lines 58-col 9/line 2, 32-41 and col 23/lines 67-col 24/line 40) for identified data (col 7/lines 50-65) for the user (col 11/lines 50-64).

It would have been obvious to one ordinary skilled in the art at the time the invention was made to include displayable data stream received in real time including displayable data stream further including future programming, motivation would be to further enhance Harper's composite interactive programming including future graphics message selection and associated commands broadcast as data codes embedded in the conventional video signal may be created to be include in other broadcast programs, as suggested by Harper. It further would have been obvious at the time the invention was made to utilize Williams teaching for providing a user periodically database information such as stock and news information, motivation would be to utilizing Williams suggestion of implementing his teachings for other type of information that can be formatted into a machine readable format compatible with whatever system design choice may be, including may be converted for broadcast in any readily format.

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Regarding claim 25, comprises the method for commanding the set-top box apparatus claimed on claims 16 and/or 34 rejected for obviousness under U.S.C. 103, this same rationale is also applied to method claims.

7. Comments: In view of the direction the claims as amendment are taken, it is respectfully noted that the invention although indeed is directed to a set-top box (see abstract and summary), the inventive subject matter seems to be of an interactive and/or graphical user interface nature. To accelerate prosecution applicant is directed to the reason for allowance and/or presented arguments that lead to the issuance of the parent application, and/or subject matter disclosed on page 11, lines 17-21 of the specification. Any comments and/or suggestions provided above are neither absolute nor conclusive and are contingent to further search and/or consideration.


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prieto, B. whose telephone number is (703) 305-0750. The Examiner can normally be reached on Monday-Friday from 6:00 to 3:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, Jack B. Harvey can be reached on (703) 305-9705. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800/4700.

Any response to this action should be mailed to:
Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to the Central Fax Office:

(703) 872-9306, for Official communications and entry;
Or Telephone:
(703) 306-5631 for TC 2100 Customer Service Office.

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington VA, Fourth Floor (Receptionist), further ensuring that a receipt is provided stamped "TC 2100".


B. Prieto
Patent Examiner
September 2, 2004